

3.4 HAZARDS AND HAZARDOUS MATERIALS

This section summarizes uses at Long Beach Airport that may have resulted in past, existing, or threatened release of hazardous substances or petroleum products into structures, soil, and/or groundwater beneath the property. Hazardous waste or materials use impacts resulting from the Proposed Project are assessed, and mitigation measures, if necessary, are described.

METHODOLOGY

The potential impacts of the Proposed Project related to hazardous materials and waste were based on available information for similar construction projects to identify potential adverse impacts related to hazardous materials and waste. Methods utilized to determine the existing conditions, as well as potential project impacts, included the following:

- Documentation of the existing and historic uses of hazards and hazardous materials at the Airport;
- Discussions with Airport staff regarding the Airport's hazardous waste use and containment practices;
- Consultation with fixed base operators (FBO) representatives, as well as representative from the Long Beach Fire Department and Los Angeles County Sheriff's Aero Bureau regarding their hazardous material use and containment practices;
- Known discharges, investigations, and remediation activities.

Known discharges, investigations, and remediation activities were determined through a search of available environmental records, which was conducted by Environmental Data Resources, Inc. (EDR) in June 2005. The searched federal, State, and local records are presented below and followed by a description of the purpose of each list/database.

Federal Records

National Priorities List: The National Priorities List (NPL) is the United States Environmental Protection Agency's (EPA) database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or meet three specific criteria set jointly by the U.S. Department of Health and Human Services and the U.S. EPA in order to become an NPL site.

RCRA Corrective Action Report: The EPA maintains the Corrective Action Report (CORRACTS) database of Resource Conservation and Recovery Act (RCRA) facilities that are undergoing "corrective action." A "corrective action order" is issued pursuant to RCRA Section 3008(h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predated RCRA.

Comprehensive Environmental Response, Compensation, and Liability Information System: The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database is a comprehensive listing of known or suspected uncontrolled or abandoned hazardous waste sites. These sites have either been investigated or are currently under investigation by the EPA for release or threatened release of hazardous substances. Once a site is placed in CERCLIS, it may be subjected to several levels of review and evaluation and ultimately placed on the NPL. CERCLIS sites designated as "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was

removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund Action or NPL consideration.

ERNS: The Emergency Response Notification System (ERNS) records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

RCRA-Info: Resource Conservation and Recovery Act Information database includes selective information on sites that generate, transport, store, treat and/or disposal of hazardous waste as defined by the Resource Conservation and Recovery Act of 1976.

RCRA Permitted Treatment, Storage, and Disposal Facilities: The EPA's RCRA Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities that report generation, storage, transportation, treatment, or disposal of hazardous waste. RCRA Permitted Treatment, Storage, Disposal Facilities (RCRA-TSD) are facilities which treat, store and/or dispose of hazardous waste.

RCRA Registered Small or Large Quantity Generators of Hazardous Waste: The RCRA Registered Small or Large Generators of Hazardous Waste (SQG/LQG) database is a compilation by the EPA of facilities, which report generation, storage, transportation, treatment of disposal of hazardous waste.

Toxic Release Inventory System: All facilities that manufacture, process, or import toxic chemicals in quantities in excess of 25,000 pounds per year are required to register with the EPA under Section 313 of the Superfund Amendments and Reauthorization Act (SARA Title III) of 1986. Data contained in the Toxic Release Inventory System (TRIS) covers approximately 20,000 sites and 75,000 chemicals releases.

State Records

CA FID: The Facility Inventory Database contains active and inactive underground storage tank locations.

State CERCLIS: The State CERCLIS (SCL) database is provided by the Department of Toxic Substances Control to evaluate and track activities at sites that may have been affected by the release of hazardous substances.

CHMIRS: The California Hazardous Material Incident Report System (CHMIRS) contains information on reported hazardous material incidents, i.e., accidental releases or spills.

CORTESE: This database identifies public drink water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with underground storage tanks (USTs) having a reportable release and all solid waste disposal facilities from which there is known migration.

State Equivalent Priority List: The State Equivalent Priority List (SPL) database is provided by the California Environmental Protection Agency, Department of Toxic Substances Control.

Leaking Underground Storage Tanks: The Leaking Underground Storage Tanks (LUST) database is provided by the California Environmental Protection Agency.

Solid Waste Landfill List: The Solid Waste Landfill List (SWLF) database is provided by the California Solid Waste Information System (SWIS) and consists of both open as well as closed inactive solid waste disposal facilities and transfer station pursuant to the Solid Waste Management and Resource Recovery Act of 1972.

Registered Underground or Aboveground Storage Tank Database: The State Water Resources Control Board, Office of Underground Storage Tanks, provides The Registered Underground or Aboveground Storage Tank Database (UST/AST). Historical UST (HIST UST) Registered Database is also provided.

ERNS and State Lists: The ERNS and State Lists (SPILLS) database contains information from spill reports made to federal authorities including the EPA, the U.S. Coast Guard, the National Response Center and the Department of Transportation.

Federal ASTM Supplemental Records

FINDS: The Facility Index System contains both facility information and “pointers” to other sources of information that contain more detail. The source of this database is the U.S. EPA/NTIS.

RAATS: The RCRA Administration Action Tracking System contains records based on enforcement actions issued under RCRA and pertaining to major violators. It includes administrative and civil actions brought by the EPA. The source of this database is the U.S. EPA.

TRIS: The Toxic Chemical Release Inventory System identifies facilities that release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313. The source of this database is the EPA.

State or Local ASTM Supplemental Records

WDS: California Water Resources Control Board – Waste Discharge System.

Emissions Inventory Data: Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

REF: This category contains properties where contamination has not been confirmed and which were determined as not requiring direct DTSC Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another state or local regulatory agency.

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests and continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. The source is the Department of Toxic Substance.

HMS: Los Angeles County Industrial Waste and Underground Storage Tank Sites.

3.4.1 EXISTING CONDITIONS

Many activities conducted currently and in the past at Long Beach Airport involve the use, storage, and handling of potentially hazardous materials. Additionally, nearly all activities at the Airport that involve the use of handling of hazardous materials also generate hazardous waste. This section discusses the existing conditions at Long Beach Airport with regard to hazardous materials and wastes that could potentially affect human health and/or the environment.

Hazardous Materials Use, Recycling, and Disposal

Activities involving the use of hazardous materials at Long Beach Airport can generally be associated with the fueling, maintenance, and repair of aircraft and other Airport-related vehicles. These activities are conducted by several Airport leaseholders and the City of Long Beach (Airport operator), as detailed below.

Airport maintenance operations include the limited use of small quantities of paints, mineral spirits, and cleaning solvents. The City fire station located on the Airport property also stores small quantities of paints and mineral spirits. Both the Airport and the fire station store and dispose of hazardous materials in a manner consistent with the policies contained in the Airport Certification Manual and Section 5.2 of the Long Beach Airport Rules and Regulations.¹ The City does not provide fueling or maintenance services for airplanes, Airport vehicles, or Fire Department vehicles on site. These vehicles are fueled and maintained off site, at the City's maintenance yard.

FBOs such as Cessna, Toyota, Mercury, and Million Air perform maintenance and repairs on commercial aircraft and the general aviation aircraft based at Long Beach Airport. Each uses oil, hydraulic, transmission, brake fluid, de-icing fluid, degreasers, lubricants, etc. These are mostly off-the-shelf items, and are in non-reportable quantities. The FBOs store up to 500 gallons of paints and cleaning solvents for use at the Airport. Tire and battery changes occur frequently on site.

Gulfstream conducts aircraft manufacturing and operates an aircraft painting facility on site. Boeing Corporation operates an aircraft modification facility on the south side of the Airport.

The FBOs and aircraft manufacturers also store up to 200 gallons of methyl ethyl ketone (MEK) and toluene on site, as well as small quantities (up to 5 gallons) of coolant/antifreeze and de-icing fluids containing ethylene glycol, or propylene glycol and isopropyl alcohol. All of these materials are stored in hangars, and large drums are containerized.

In addition to the above, the June 2005 EDR Report identifies 21 UST sites (active and historical) at the Airport; however, none of these USTs are located within the immediate project footprint. It should be noted that the information-gathering process for this EIR identified more than 21 UST sites at the Airport, as discussed below under the heading "Fuel Storage Facilities."

All waste oil and solvents that are collected at the Airport are stored temporarily and then sent out for recycling or proper disposal. Each entity contracts individually with waste hauling companies for the collection of, recycling, or proper disposal of hazardous and California regulated waste.

¹ These documents are available for review at the City of Long Beach Planning Department, 333 West Ocean Boulevard, 4th Floor, Long Beach, California.

There are a number of oil-water separators located throughout the airfield operated by the FBOs. Wastewater and sludge from these facilities are taken off site for recycling and disposal.

According to federal records, one suspected uncontrolled or abandoned hazardous waste site occurs on Airport property. The location is 4150 Donald Douglas Drive, formerly the site of Pac-Aero Engineering. The site was not placed on the National Priorities List (NPL). Preliminary assessment began on May 1, 1985; the case was closed on January 18, 1989. Potential for an environmental condition on the subject site is low.

In addition, the federal WDS database lists AASI Aircraft, 3205 Lakewood Boulevard, as being subject to California waste discharge requirements as a result of continuous or seasonal discharges.

Fuel Storage Facilities and Fueling Activities

The greatest quantity of hazardous materials stored at Long Beach Airport is Jet-A fuel and Av-gas. Both the Airport and the FBOs at the Airport provide facilities for storing and dispensing these fuels. The FBOs also provide facilities for the temporary collection and storage of waste fuel and oil generated by commercial aircraft and the private small aircraft owners that are tie-down tenants. With the exception of Million Air's north ramp location, none of these facilities is within the footprint of the Proposed Project. Million Air's north ramp location provides four 50,000 gallon ASTs for dispensing Jet A fuel.

Throughout the Airport, fuel is dispensed from an underground hydrant system as well as via trucks. All personnel conducting fueling activities at the Airport receive FAA-mandated training. Furthermore, all fueling operations are required to prepare Emergency Response, Spill Response, and Storm Water Pollution Prevention Plans. These plans must meet the approval of the Long Beach Fire Department, City of Long Beach, and State Health and Water Quality officials. All of these facilities have permits from these agencies to operate, as well as permits from the Air Quality Management District. These agencies and the FAA regularly inspect all of the fueling and maintenance facilities.

If a major spill occurs during any fueling activity, the on-site Fire Station (Station 16) is notified and responds to the scene for clean up. Tanker truck and into-plane operators are primarily responsible for clean up and containment; however, Fire Station personnel will intervene to prevent a fire or to prevent spilled fuel from entering the storm drain system. Small spills are cleaned up using absorbent pads and materials stored on site. In the event of a major spill, the Long Beach Fire Department Hazardous Materials Response Team is called to the scene. Clean-up and further containment is the responsibility of the FBOs, fuel farm, and into-plane operators who contract with various spill response companies.

Known Discharges

A search of the environmental records conducted by EDR identified that a few violations in storing or handling hazardous wastes have occurred on Airport property since 1981. In addition, several incidences of spills were reported. Where there have been violations or reported incidents, all have been remediated and the cases have been closed. There are no current or outstanding violations or reported incidents. Findings and recorded actions are as follows:

Violation 1: Gulfstream Aerospace Corporation, 4150 Donald Douglas Drive, Long Beach. Violations reported in 1990 and 2002. Compliance orders were received, final monetary penalties were imposed, and the cases were closed May 8, 2002.

Potential for an environmental condition on the subject site is low. (Databases: RCRA-LQG, RAATS, FINDS, REF)

- Violation 2: Hamilton Sundstrand, 4401 Donald Douglas Drive, Long Beach. Violation found. Area of violation: Generator-All Requirements (Oversight). Date of Violation: January 7, 1993. Date of Achieved Compliance: April 12, 1993. Case closed. Potential for an environmental condition on the subject site is low. This site is subject to California waste discharge requirements as a result of continuous or seasonal discharges. (Databases: RCRA-Info, FINDS, WDS)
- Violation 3: Gulfstream Aerospace Paint Hangar, 3495 Lakewood Boulevard, Long Beach. Violations reported in 2002, final monetary penalties were imposed and the cases were closed on May 6, 2002. Potential for an environmental condition on the subject site is low. (Databases: RCRA-LQG, FINDS)
- Violation 4: Rockwell International Corporation, 4310 Donald Douglas Drive, Long Beach. Violation found. Area of violation: Generator-General Requirements. Date of Violation: September 24, 2004. Date of Achieved Compliance: October 24, 2004. Case closed. Potential for an environmental condition on the subject site is low. (Database: RCRC-Info)
- Spill 1: Leaking UST at Long Beach Airport Fuel D, 4301 Donald Douglas Drive. September 21, 1984. Characterization began on June 22, 1988. Remedial Action Underway: September 16, 1988. Case closed. Potential for an environmental condition on the subject site is low. (Databases: CORTESE, LUST, FINDS)
- Spill 2: Emergency release of five barrels of crude oil into the soil under the runway at Long Beach Airport. Cause: equipment failure. January 25, 1991. Case closed. Potential for an environmental condition on the subject site is low. (Database: ERNS)
- Spill 3: Leaking UST at Cameron Dumas Property, 4310 Douglas Drive. May 5, 1998. Case closed. Potential for an environmental condition on the subject site is low. (Databases: CORTESE, LUST)
- Spill 4: Hose broke on a filter press within the water treatment system causing a substance to leak out at Gulfstream Aerospace Paint Hangar, 3495 Lakewood Boulevard. June 3, 1998. Clean up complete. Case closed. Potential for an environmental condition on the subject site is low. (Database: CHMIRS)
- Spill 5: Jet fuel release at 4310 Douglas Drive. Date of incident is unknown. Case closed. Potential for an environmental condition on the subject site is low. (Database: CHMIRS)
- Spill 6: Release of grey substance. 4401 Donald Douglas Drive. Date of incident is unknown. Case closed. Potential for an environmental condition on the subject site is low. (Database: CHMIRS)
- Spill 7: Visual inspection of the storm drain at Hamilton Sunstrand, 4401 Donald Douglas Drive, showed substance resembling dry gray paint was spilled around the storm drain. Clean-up was performed and full containment reported by Long Beach Fire Department, 2001. Case closed. Potential for an environmental condition on the subject sites is low. (Database: TRIS)

Hazardous Waste Practices

Chapter 5 of the *Long Beach Airport Certification Manual*² provides documented procedures for handling hazardous materials at the Airport. These procedures address fuel handling, inspections, fueler training, corrective action, and hazardous material clean-up procedures. In addition, Section 5.2 of the *Long Beach Airport Rules³ and Regulations* sets forth specific requirements for the handling of hazardous materials on Airport property. It should be noted that the *Long Beach Airport Certification Manual* received FAA approval on September 9, 1999, and remains in effect today.

Regulated Materials

Asbestos

Asbestos is a strong, incombustible, and corrosion-resistant material, which was used in many commercial products prior to the 1940s up until the early 1970s. If inhaled, asbestos fibers can result in serious health problems. Asbestos Containing Materials (ACM) are building materials containing more than one percent (one percent) asbestos (some state and regional regulators, including California, impose a one tenth of one percent [0.01 percent] threshold).

Historically, ACM were used extensively in the Airport terminal area. A 1998 Asbestos Survey conducted by Levine, Frick, Recon found asbestos in the thermal system insulation, floor tiles, black mastic, vinyl sheet flooring, and gray exterior window putty. The survey concluded that the ACM were generally in good condition and should not pose a health risk to the building occupants if left undisturbed. Consistent with the survey's recommendations, an ACM Operations and Maintenance Program was initiated at the Airport.

Due to the date the buildings were constructed, it is also possible that ACM or asbestos concrete pipe (ACP) could exist at the Million Air site. An official asbestos survey has not been conducted for the Million Air site.

Lead-Based Paint (LBP)

Portions of several structures within the study area would be demolished as a result of the Proposed Project. Lead-based paint has been regulated for residential use since the 1970s; however, LBP use in commercial buildings has not been subject to regulation in the State of California. It is, therefore, reasonable to assume that lead-based paint has been used on the project site in the past, and that there would be the potential for LBP exposure as a result of proposed demolition activities. These areas would include structures or portions, thereof, roadway-striped areas surrounding the terminal, and in the parking lots and the roadways surrounding the parking lots.

Aerially-Deposited Lead

Up until the 1990s, lead-based additives in gasoline were expelled from automobile engine exhausts onto adjacent roadways and soil, roadway shoulders, and medians. Consequently, lead was aerially deposited as a particulate. Because the Airport is adjacent to I-405 and several busy roadways and has involved the historic use of jet fuel and diesel fuel, elevated concentrations of lead are likely to be found in near-surface soil at the Airport, especially in

² Available for review at the City of Long Beach Planning Department, 333 West Ocean Boulevard, 4th Floor, Long Beach, California.

³ Ibid.

those areas where unpaved soil and medians will be disturbed as a result of project grading/construction.

Dichloro-Diphenyl-Trichloroethane (DDT)

In 2004, during the Airport runway project, trace amounts of dichloro-diphenyl-trichloroethane (DDT) were found in the soil due to its former use as a pesticide on the grassy areas between the existing runways. The concentrations of DDT were well below the threshold that would result in a health hazard or require remediation. Because of the location of Parcel O to the grassy areas, it is reasonable to assume that there would be the potential for exposure of trace amounts of DDT as a result of grading and other soil disturbance activities on Parcel O.

Methane

Oil wells have historically been located on Airport property; however, all oil wells on Airport property have been abandoned (see below). Borings conducted in conjunction with the Airport runway project and prior excavations associated with previous airfield constructions projects also did not encounter methane deposits.

Abandoned Oil Wells

There are several abandoned oils wells on Long Beach Airport property, as well as in the vicinity of Long Beach Airport. The following records were submitted to the United States Department of Conservation, Department of Oil and Gas for abandoned oil wells located in the vicinity of the Proposed Project:

Amerada Petroleum Corporation, “Lakewood Community” 1 Oil Well

A Notice of Intention to Drill New Well was submitted on August 15, 1968, for the “Lakewood Community” 1 prospect well. The site is located in the City of Long Beach approximately 640 feet east along the north side of Donald Douglas Drive from the centerline of Lakewood Boulevard, then 364 feet north at right angles, or approximately 500 feet north and 2,000 feet west from the southeast corner. A Special Report on Operations Witnessed was submitted for the “Lakewood Community 1” prospect well on October 22, 1968, detailing the final abandonment condition. The report states that holes were drilled, 50 sacks of cement were pumped in the hole through a drill pipe hanging at 2,500 feet; and that the cement plug at the reported depth of 2,311 feet supported one-quarter the weight of the drill pipe. On November 20, 1968, witness engineer R. Johnson stated the location and hardness of the cement plug at 2,311 feet were approved. Mr. Johnson noted the well site had been graded over and there was no evidence of seepage.

Chevron Texaco “Weingart” 1 Oil Well

A Notice of Intention to Drill New Well was submitted on September 16, 1955 for the “Weingart” 1 prospect well. The site is located in the City of Long Beach 450.1 feet southerly along the centerline extended line and 59.1 feet westerly at right angles from the intersection of Carson Street and Paramount Boulevard, or approximately 4,480 feet north and 2,640 feet east from the southwest corner. A Special Report on Operations Witnessed was submitted on December 1, 1955, detailing the final abandonment condition. On November 26, 1955, 175 sacks of cement were pumped into the hole. The report states the present condition of the well as plugged with cement. The cement plug at the reported depth of 2,362 feet supported 11 points of the weight of the drill pipe. Mr. W. Polglase was the witness engineer to this final abandonment action.

In addition to the abandoned oil wells, the Airport area has multiple underground pipelines. There is also a natural gas pipeline in the terminal area and under surface parking lot areas. However, there are no known gasoline or oil lines in the terminal or ramp areas.

Related Planning Programs

City of Long Beach General Plan

Public Safety Element

The City's Public Safety Element was adopted in 1975 pursuant to the requirements of California Government Code 65302.1. The City is currently in the preliminary stages of redoing the Public Safety Element, but updated information was not available at the time this document was prepared. Therefore, the analysis in this document builds upon the statements and goals included in the 1975 Public Safety Element. It should be noted, however, that much has changed since adoption of the Public Safety Element 30 years ago and major strides have been made to implement the Element. Consequently, the analysis of this document as provided under the impact discussion of Threshold 4 provides current information in response to statements and goals that are no longer accurate or appropriate.

Statements

Some tank farms and aboveground storage of other dangerous fuels are incompatibly located in close proximity to airport operations. Future land use planning must recognize such hazards and provide for adequate spacing of these incompatible uses. It is particularly important to avoid placing fuel storage facilities in line with the establish flight pattern.

Management Goals

1. Develop mechanisms for implementing improved safety considerations.
5. Establish safety guidelines to evaluate all potential safety hazards and mitigate existing problems.

Development Goals

2. Utilize safety considerations as a means of encouraging and enhancing desired land use patterns.
4. Continue to identify existing or proposed uses or activities that may pose safety hazards.
9. Encourage development that would augment efforts of other safety-related Departments of the City (i.e. design for adequate access for firefighting equipment and police surveillance).

Protection Goals

1. Use safety precautions as one means of preventing blight and deterioration.
3. Reduce public exposure to safety hazards.
6. Assure continued economic stability and growth minimizing potential safety hazards.
7. Protect the citizens against possible personal loss resulting from disaster events.
9. Continue to inform the public of potential safety hazards and what to do in times of emergencies.
10. Provide the maximum feasible level of public safety protection services.

Remedial Action Goals

2. Eliminate uses which present safety hazards.

City of Long Beach Strategic Plan 2010

The City published its *Strategic Plan 2010* in January 2001. The plan grew out of a three-year effort that involved over 100 Long Beach residents representing the city's neighborhoods, ethnic groups, business and education interests, and environmental and community organizations. The following goal and policy relevant to hazards and hazardous materials are included within *Strategic Plan 2010*:

Environmental Goals

3. Improve management of water resources and restore wetlands and riparian habitat.

Policy: Implement additional strategies to prevent pollution from entering storms drains and the ocean.

3.4.2 IMPACT ANALYSIS

Thresholds of Significance

The thresholds of significance for this EIR have been determined in cooperation with the City of Long Beach.

The project would cause a significant impact if it would:

- Create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.
- Be located on a site which is included on a list of hazardous materials sites compiles pursuant to Government Code Section 65962.5 and as a result would create a significant hazard to the public or to the environment.
- Be inconsistent with the applicable goals, objectives and requirements of the City of Long Beach Public Safety Element or Strategic Plan 2010.

Proposed Project

As discussed in Section 2.5, Project Description, modification of the leasehold on the north side of the terminal area immediately north of the existing north holdroom is a planned construction activity. Demolition and removal of the existing Million Air aviation service center as well as the asphalt and concrete in this area of the project site would be required. This section summarizes the hazardous waste or materials use impacts that would result from related demolition, removal, and construction activities and describes necessary mitigation measures.

Threshold 1: The project would cause a significant impact if it would create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Construction Related Impacts

The Long Beach Airport terminal contains ACM. While the terminal, as a whole, would not be demolished, portions of it would be modified and renovated. Terminal area improvements would involve demolition/construction of walls in these areas and would have the potential to introduce ACM into the environment, which would be considered a significant impact. This impact would be reduced to a less than significant level via compliance with existing regulations including a Health and Safety Contingency Plan (HSCP) compliant with the requirements of the California Code of Regulations (CCR), Title 8, General Industry Safety Orders – Control of Hazardous Substances.

The potential exists for particles of lead-based paint to be released into the environment during construction of the Proposed Project. Lead-based paint has not been subject to regulation when used in conjunction with commercial uses, and there is a potential for it to exist within the Airport terminal and other structures proposed for demolition and/or improvement. Potential significant impacts associated with the removal of lead-based paints would be reduced to a less than significant level via compliance with existing regulations requiring screening for lead-based paint and by adhering to all local, State, and federal requirements for its removal. The implementation of an HSCP (see MM 3.4-1, below) would also contribute to the reduction of potential lead-based paint impact to a level considered less than significant.

Because of the proximity of Parcel O to I-405 freeway, there is the potential for aurally deposited lead on-site to be released into the environment during construction of the Proposed Project. Potential significant impacts associated with the disturbance and removal of soil with aurally deposited lead would be reduced to a less than significant level via compliance with existing regulations requiring screening for aurally deposited lead and by adhering to all local, State, and federal requirements for its removal.

Because of the proximity of Parcel O to the grassy areas between the runways, there is the potential for trace amounts of DDT to be present and released into the environment during construction of the Proposed Project. Potential significant impacts associated with the disturbance and removal of soil with trace amounts of DDT would be reduced to a less than significant level via compliance with existing regulations requiring screening for aurally deposited lead and by adhering to all local, State, and federal requirements for its removal.

During construction of the Proposed Project some hazardous materials would be brought on-site, used and stored throughout the project area and construction lay down areas. Though the materials would be standard construction supplies (e.g., paint and fuel for generators), there would be the potential for short-term significant hazardous materials impacts associated with construction activities. Implementation of standard regulations and conditions controlling these substances would reduce the risk to a level considered less than significant. These standard regulations and conditions include the applicable State and federal regulations on the handling and storage of these materials and the Airport's Stormwater Pollution Prevention Plan (SWPPP) for the Airport's existing Industrial Permit and for future Construction Activity Permits. No additional mitigation would be required.

Impact 3.4-1 *During construction, asbestos containing materials could be disturbed and introduced into the environment. This impact would be reduced to a level of less than significant with implementation of SC 3.4-3, SC 3.4-4, and MM 3.4-1.*

- Impact 3.4-2** *During construction, lead-based paint could be introduced into the environment. This impact would be reduced to a level of less than significant with implementation of MM 3.4-1 and MM 3.4-2.*
- Impact 3.4-3** *During grading activities at Parcel O, aerially-deposited lead could be introduced into the environment. This impact would be reduced to a level of less than significant with the implementation of SC 3.4-9 and MM 3.4-1.*
- Impact 3.4-4** *During grading activities at Parcel O, DDT could be introduced into the environment. This impact would be reduced to a level of less than significant with the implementation of SC 3.4-9 and MM 3.4-1.*

Project Related Impacts

The Proposed Project would involve improvements to the existing Airport terminal and construction of a new parking structure to better serve existing demand at the Airport. Neither of these improvements would causally result in impacts associated with hazardous materials and hazardous wastes. Because the Proposed Project would not result in impacts, no mitigation measures would be required.

Additional Effects Related to Optimized Flights

As previously stated, this EIR analyzes an Optimized Flights scenario wherein operations at the Airport could increase to include 25 daily commuter flights and up to 11 additional daily commercial flights, as provided for in the Airport Noise Compatibility Ordinance. The evaluation of the commuter and commercial carrier flights is provided at the City Council's request because the impacts associated with these flights would be above current baseline conditions. The City would not have any discretion on allowing the flights if the conditions outlined in the Airport Noise Compatibility Ordinance are met.

Under the Optimized Flights scenario, there could be an incremental increase in the likelihood of hazardous materials being released into the environment through events such as fuel spills. However, as discussed above, the hazardous waste practices that are currently in place at the Airport would continue to guide activities at the Airport in the future. These practices include procedures to address fuel handling, inspections, fueler training, corrective action, and hazardous material clean up. Therefore, no significant impacts would be expected to result from implementation of the Optimized Flights scenario. No mitigation measures would be required.

Threshold 2: *The project would cause a significant impact if it would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.*

There are five existing and no proposed schools located within approximately one-quarter mile of the Airport. They include:

- Alpert Jewish Community Center, 3801 East Willow Street
- Buffum Elementary School, 2350 Ximeno Avenue
- Long Beach Unified School District – Truancy Center, 3090 East 29th Street
- Marina Montessori School, 2301 Ximeno Avenue
- Westerly School of Long Beach, 2950 East 29th Street

Construction Related Impacts

During construction, Willow Street could be used as a haul route. Consequently, construction traffic may go past the Alpert Jewish Community Center. Therefore, it is possible that hazardous materials could be handled within one-quarter mile of the school site during construction. This would result in a short-term potentially significant impact. Implementation of Mitigation Measure 3.4-4 would reduce this impact to a level considered less than significant. None of the other schools listed above would be affected by emissions associated with construction activities for the Proposed Project. No further mitigation would be required.

Impact 3.4-5 *During construction, hazardous materials could be transported onto the Airport along established haul routes, including Willow Street. Potential impacts to schools would be mitigated to a level considered less than significant through the implementation of Mitigation Measure 3.4-4.*

Project Related Impacts

The ongoing use of the terminal area improvements would not result in the emission of hazardous materials. Additionally, as indicated above, the Proposed Project is not within one-quarter mile of any schools. Therefore, no mitigation measures would be required.

Additional Effects Related to Optimized Flights

Under the Optimized Flights scenario, there would be an incremental increase in the potential for hazardous emissions to be released into the environment during aircraft fueling and maintenance activities. Hazardous or acutely hazardous materials could be handled within one-quarter mile of existing schools. Specifically, the FBOs located along Spring Street (near the above-listed schools) would continue to perform maintenance and repairs on commercial aircraft and the general aviation aircraft based at Long Beach Airport.⁴ As previously stated, the FBOs use oil, hydraulic fluid, transmission fluid, brake fluid, de-icing fluid, degreasers, lubricants, and other products to service aircraft at the Airport. In addition, they store paints, cleaning solvents, and other hazardous materials on site for use at the Airport and make frequent tire and battery changes. Although these services represent a continuation of existing practices at the Airport, it would be reasonable to anticipate that demand for these services could increase under the Optimized Flights scenario. All the existing regulations and programs currently in place at the Airport to address the safe handling of hazardous materials would apply to the increased flights, as well as the existing flights. Therefore, even though there would be a potential increase in hazardous emissions and hazardous materials handled at the Airport, the current rules and regulations would adequately address these issues. Standard Condition 3.4-1 addresses these potential impacts.

Threshold 3: *The project would cause a significant impact if it were located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result would create a significant hazard to the public or to the environment.*

Construction Related Impacts

Government Code Section 65962.5 requires the California Environmental Protection Agency (CEPA) to provide a listing of known hazardous materials release sites. This listing, known as

⁴ It should be noted that the FBOs primarily provide service for general aviation aircraft.

the Hazardous Waste and Substances Sites (Cortese) List is a planning document used by State and local agencies as well as developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. A search of the environmental records conducted by EDR identified 60 sites located within one-half mile of the Long Beach Airport as appearing on federal, State and/or local databases related to hazardous substances. Of the 60 listed sites, 14 listed incidents are related to the release of toxic substances into the environment within one-half mile of the Proposed Project. In each case, these incidents have been identified as being remediated and all of the cases have been closed. Two of the incidents are included on the Cortese list: (1) the leaking UST at Long Beach Airport Fuel D, 4301 Donald Douglas Drive, and (2) the leaking UST at the Cameron Dumas property, 4310 Donald Douglas Drive. As stated previously, remedial action has been completed at these sites and the cases have been closed. The potential for an environmental condition on either of the subject sites is low.

There is a low potential for hazardous materials to exist within the footprint of the proposed terminal improvements project. However, it remains that there is a slight potential for unknown wastes or suspect materials to be discovered during the construction phase of the Proposed Project. Though not considered a significant impact pursuant to this threshold, as a measure of caution, a mitigation measure has been recommended requiring the contractor's compliance with the measures contained in the approved Health and Safety Contingency Plan (HSCP) (see MM 3.4-1, below) should a discovery occur.

It should be noted that, although oil wells have historically been located on Airport property, as discussed above, borings done in the vicinity of the abandoned oil well sites have demonstrated that there are no methane deposits at either location. Likewise, no methane deposits have been encountered during excavations associated with any airfield construction projects in the past.

Proposed Project Impacts

As stated above, the locations where releases of hazardous materials have been identified have been remediated in accordance with State and local standards. Construction of the Proposed Project would not expose the public to impacts associated with known hazardous materials sites pursuant to Government Code Section 65962.5. Because the Proposed Project would not result in operational impacts, no mitigation measures would be required.

Additional Effects Related to Optimized Flights

Though hazardous material releases have been documented on the Airport in the past, remediation has occurred, where required, and all cases have been closed. As discussed above, the hazardous waste practices that are currently in place at the Airport would continue to guide activities at the Airport in the future. Therefore, no new impacts would be expected to result from implementation of the Optimized Flights scenario. No mitigation measures would be required.

Threshold 4: *The project would cause a significant impact if it would be inconsistent with the applicable goals, objectives and requirements of the City of Long Beach Public Safety Element or Strategic Plan 2010.*

Table 3.4-1 provides a consistency analysis of the Proposed Project with applicable hazard related goals and policies of the City of Long Beach General Plan Public Safety Element and Strategic Plan 2010.

**TABLE 3.4-1
CONSISTENCY OF THE PROPOSED PROJECT WITH HAZARDS AND
HAZARDOUS WASTE-RELATED GOALS AND POLICIES**

Goals and Policies	Consistency Analysis
<i>City of Long Beach General Plan</i>	
<u>Public Safety Element</u> Some tank farms and above-ground storage of other dangerous fuels are incompatibly located in close proximity to airport operations. Future land use planning must recognize such hazards and provide for adequate spacing of these incompatible uses. It is particularly important to avoid placing fuel storage facilities in line with the establish flight pattern.	Since adoption of the Public Safety Element in 1975, the following actions have been taken to remove incompatible uses from the Airport area. Specifically: <ul style="list-style-type: none"> • The natural gas storage tank of the Long Beach Gas Department, which was in the flight track of general aviation at the Airport, was removed. • Chlorine gas tanks are stored in concrete bunkers virtually underground at the new Long Beach Water Department facilities near the Airport.
<u>Management Goals</u> 1. Develop mechanisms for implementing improved safety considerations. 5. Establish safety guidelines to evaluate all potential safety hazards and mitigate existing problems.	In addition, a new Emergency Management Facility was constructed at the southeast corner of Redondo Ave. and Spring St. – just across from the Airport – which would enable the City to be better able to respond to hazardous waste incidents at the Airport.
<u>Development Goals</u> 2. Utilize safety considerations as a means of encouraging and enhancing desired land use patterns. 4. Continue to identify existing or proposed uses or activities that may pose safety hazards. 9. Encourage development that would augment efforts of other safety-related Departments of the City (i.e. design for adequate access for firefighting equipment and police surveillance).	Finally, a new Police facility was constructed at Atlantic Ave. and Spring St. which would enable the City to be better able to prevent against and respond to potential hazards at the Airport.
<u>Protection Goals</u> 1. Use safety precautions as one means of preventing blight and deterioration. 3. Reduce public exposure to safety hazards. 6. Assure continued economic stability and growth minimizing potential safety hazards. 7. Protect the citizens against possible personal loss resulting from disaster events. 9. Continue to inform the public of potential safety hazards and what to do in times of emergencies. 10. Provide the maximum feasible level of public safety protection services.	Over the past 20 years, unused USTs at the Airport have been closed or removed, with site remediation, to meet State requirements. New USTs have state-of-the-art spill and leak mitigation, tank integrity monitoring, and secondary containment systems.
<u>Remedial Action Goals</u> 2. Eliminate uses which present safety hazards.	
<i>City of Long Beach Strategic Plan 2010</i>	
A Healthy Environment/A Sustainable City GOAL 3: Improve management of water resources and restore riparian habitat. Policy: Implement additional strategies to prevent pollution from entering storm drains and the ocean.	The City has achieved on-going compliance with Industrial and Construction National Pollutant Discharge Elimination System (NPDES) permits for the Airport. In addition, the City conducts tenant education programs as part of its Industrial Permit.

Alternative A (2003 NOP)

Construction Related Impacts

As with the Proposed Project, construction of Alternative A could introduce asbestos containing materials and/or lead-based paint into the environment (Impacts 3.4-1 and 3.4-2, respectively). There is a slight potential for unknown wastes or suspect materials to be discovered during the construction phase of the Proposed Project. These impacts would be reduced to a less than significant level via the implementation of a HSCP compliant with the requirements of the CCR, Title 8, General Industry Safety Orders – Control of Hazardous Substances (see MM 3.4-1, below).

During the construction of Alternative A, construction supplies that would be considered hazardous would be brought onto the Proposed Project site. Though the materials would be standard construction supplies (e.g., paint and fuel for generators), there would be the potential for short-term significant hazardous materials impacts associated with construction activities. As with the Proposed Project, implementation of existing regulations and standard conditions would minimize these impacts. No additional mitigation would be required.

During construction, hazardous materials could be transported onto the Airport along established haul routes, including Willow Street. Potential impacts to schools would be mitigated to a level considered less than significant through implementation of Mitigation Measure 3.4-4.

Project Related Impacts

As with the Proposed Project, Alternative A would not causally result in impacts associated with the handling, release or exposure to hazardous materials and hazardous wastes. Because the Alternative A would not result in operational impacts, no mitigation measures would be required.

Additional Effects Related to Optimized Flights

Operation of the Optimized Flights scenario would result in an incremental increase in the potential for a release of hazardous materials into the environment through events such as fuel spills. However, as discussed above, the hazardous waste practices that are currently in place at the Airport would continue to guide activities at the Airport in the future. Therefore, no significant impacts would be expected to result from implementation of the Optimized Flights scenario. No mitigation measures would be required.

Though hazardous material releases have been documented on the Airport in the past, remediation has occurred, where required, and all cases have been closed. As discussed above, the hazardous waste practices that are currently in place at the Airport would continue to guide activities at the Airport in the future. Therefore, no new impacts would be expected to result from implementation of the Optimized Flights scenario. No mitigation measures would be required.

As previously stated, though there are schools within one-quarter mile of the Airport, all the existing regulations and programs currently in place at the Airport to address the safe handling of hazardous materials would apply to the increased flights, as well as the existing flights. Therefore, even though there would be a potential increase in hazardous emissions and hazardous materials handled at the Airport, the current rules and regulations would adequately address these issues. These rules and regulations include the Airport Certification Manual and the Long Beach Airport Rules and Regulations.

Alternative B (Reduced Facilities)

Construction Related Impacts

As with the Proposed Project, construction of Alternative B could introduce asbestos containing materials and/or lead-based paint into the environment (Impacts 3.4-1 and 3.4-2, respectively). There is a slight potential for unknown wastes or suspect materials to be discovered during the construction phase of the Proposed Project. These impacts would be reduced to a less than significant level via the implementation of a HSCP compliant with the requirements of the CCR, Title 8, General Industry Safety Orders – Control of Hazardous Substances (see MM 3.4-1, below).

During the construction of Alternative B, construction supplies that would be considered hazardous would be brought onto the Proposed Project site. Though the materials would be standard construction supplies (e.g., paint and fuel for generators), there would be the potential for short-term significant hazardous materials impacts associated with construction activities. These impacts would be reduced to a level considered less than significant by the Airport's existing SWPPP. No additional mitigation would be required.

During construction, hazardous materials could be transported onto the Airport along established haul routes, including Willow Street. Potential impacts to schools would be mitigated to a level considered less than significant through implementation of Mitigation Measure 3.4-4.

Project Related Impacts

As with the Proposed Project, Alternative B would not causally result in impacts associated with the handling, release or exposure to hazardous materials and hazardous wastes. Because the Alternative B would not result in operational impacts, no mitigation measures would be required.

Additional Effects Related to Optimized Flights

Operation of the Optimized Flights scenario would result in an incremental increase in the potential for a release of hazardous materials into the environment through events such as fuel spills. However, as discussed above, the hazardous waste practices that are currently in place at the Airport would continue to guide activities at the Airport in the future. Therefore, no significant impacts would be expected to result from implementation of the Optimized Flights scenario. No mitigation measures would be required.

Though hazardous material releases have been documented on the Airport in the past, remediation has occurred, where required, and all cases have been closed. As discussed above, the hazardous waste practices that are currently in place at the Airport would continue to guide activities at the Airport in the future. Therefore, no new impacts would be expected to result from implementation of the Optimized Flights scenario. No mitigation measures would be required.

As previously stated, though there are schools within one-quarter mile of the Airport, all the existing regulations and programs currently in place at the Airport to address the safe handling of hazardous materials would apply to the increased flights, as well as the existing flights. Therefore, even though there would be a potential increase in hazardous emissions and hazardous materials handled at the Airport, the Airport Certification Manual and the Long Beach Airport Rules and Regulations would adequately address these issues.

Alternative C (No Project)

Construction Related Impacts

Alternative C would not result in any construction-related impacts in that it does not propose any construction activities. No impacts would occur. No mitigation would be required.

Project Related Impacts

Alternative C would not result in any operational impacts in that it does not propose an increase in operational activities at the Airport. No impacts would occur. No mitigation would be required.

Additional Effects Related to Optimized Flights

Operation of the Optimized Flights scenario would result in an incremental increase in the potential for a release of hazardous materials into the environment through events such as fuel spills. However, as discussed above, the hazardous waste practices that are currently in place at the Airport would continue to guide activities at the Airport in the future. Therefore, no significant impacts would be expected to result from implementation of the Optimized Flights scenario. No mitigation measures would be required.

Though hazardous material releases have been documented on the Airport in the past, remediation has occurred, where required, and all cases have been closed. As discussed above, the hazardous waste practices that are currently in place at the Airport would continue to guide activities at the Airport in the future. Therefore, no new impacts would be expected to result from implementation of the Optimized Flights scenario. No mitigation measures would be required.

As previously stated, though there are schools within one-quarter mile of the Airport, all the existing regulations and programs currently in place at the Airport to address the safe handling of hazardous materials would apply to the increased flights, as well as the existing flights. Therefore, even though there would be a potential increase in hazardous emissions and hazardous materials handled at the Airport, the current rules and regulations would adequately address these issues.

3.4.3 MITIGATION PROGRAM

Application of the following project design features and mitigation measures would reduce potential project-related impacts to a level considered less than significant.

Project Design Features

PDF 3.4-1 The proposed terminal improvements would be constructed in a manner consistent with LEED standards certification requirements to, among other things, minimize potential hazards and hazardous waste impacts.

Standard Conditions and Requirements

SC 3.4-1 The Proposed Project and any additional flights associated with optimize flight operations would be required to comply with the provisions of the *Long Beach Airport Certification Manual* and *Long Beach Airport Rules and Regulations* pertaining to the handling, use, and disposal of hazardous materials and hazardous wastes.

- SC 3.4-2 The Contractor shall develop a SWPPP to minimize potential short-term significant hazardous materials impacts associated with construction activities.
- SC 3.4-3 The Airport Terminal Building is known to contain ACMs. The applicant shall comply with notification and asbestos removal procedures outlined in SCAQMD Rule 1403 to reduce asbestos-related health issues.
- SC 3.4-4 Prior to demolition of any facilities at Million Air, the applicant shall test for asbestos containing materials. Should ACM or ACP be found, the applicant shall comply with notification and asbestos removal procedures outlined in SCAQMD Rule 1403 to reduce asbestos related health risks.
- SC 3.4-5 The City Engineer, or his designee, shall verify that every contractor transporting or handling hazardous materials and/or wastes during project implementation has permits and licenses from all relative health and regulatory agencies to operate and properly manifest all hazardous or California regulated material.
- SC 3.4-6 The Airport shall comply with the Airport Industrial NPDES permit (CAS000001/WDID 4B19S004985). Construction activities that disturbs more than one acre shall abide by the State issued State Water Resources Control Board Order 99-08 General Permit CAS000002. As part of this process, the Airport would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP).
- SC 3.4-7 Construction of the Proposed Project shall be in compliance with local and State construction and building requirements and regulations, including the Uniform Building Code.
- SC 3.4-8 Prior to initiating construction activities, the contractor shall verify the locations of underground pipelines in the terminal area, ramp, and parking areas. Appropriate precautions shall be taken to ensure that pipelines are not disturbed or are properly relocated during construction.
- SC 3.4-9 Prior to issuance of grading permits, the applicant shall test the soil for aerially deposited lead and dichloro-diphenyl-trichloroethane (DDT). As a result of soil testing, should aerially deposited lead or DDT be found in quantities that exceed acceptable thresholds, the applicant shall develop a remediation program to dispose of soil material properly.

Mitigation Measures

- MM 3.4-1 Prior to the initiation of demolition/construction, the Contractor shall develop an approved Health and Safety Contingency Plan (HSCP) in the event that unanticipated/unknown environmental contaminants are encountered during construction. The plan shall be developed to protect workers, safeguard the environment, and meet the requirements of the CCR, Title 8, General Industry Safety Orders – Control of Hazardous Substances. The Plan shall include measures for handling any unknown wastes or suspect materials discovered during construction by the Contractor, which he/she believes may involve hazardous waste or hazardous materials.

The HSCP should be prepared as a supplemental to the Contractor's Site-Specific Health and Safety Plan, which should be prepared to meet the requirements of CCR Title 8, Construction Safety Orders.

- MM 3.4-2 Prior to the demolition of any on-site building or portion of any on-site building constructed prior to 1973, the City shall screen the buildings for lead-based paint. If lead-based paint is identified, mitigation shall be developed in accordance with all applicable federal, State, and local regulatory requirements.
- MM 3.4-3 During demolition and excavation activities and during preparation of the geotechnical study in the design phase, the City shall have a qualified inspector onsite to inspect and sample the soil for contaminants. If observations during demolition activities indicate that site soil is affected by contaminants, demolition work should be stopped in the area involved until an analysis of the soil conditions can be performed and additional recommendations evaluated and performed as necessary.
- MM 3.4-4 As part of the contract specification, a haul route, which could include Willow Street, shall be designated by the City Engineer, or his designee. During construction, the City Engineer, or his designee shall instruct every contractor that no hazardous or acutely hazardous materials may be transported onto the Airport via Willow Street to avoid potential impacts within one-quarter mile of the Alpert Jewish Community Center, where school programs are conducted

Level of Significance After Mitigation

The potentially significant construction-related hazardous waste or hazardous materials impacts of the Proposed Project would be reduced to a level considered less than significant with implementation of the above standard conditions and mitigation measures.